

- 1) Walter must make a decision about spending \$100 to fix his old water heater. It is an electric unit, and he estimates that it costs him \$125 a year to provide his home with hot water. His other option is to buy a new gas water heater for \$350 (including installation). Because the new unit will be more efficient, the yearly cost is only \$75. How long will it take until the new unit pays for itself? Show all your work.

- 2) Megan has narrowed her choice to two calculators. The first costs \$47.00 upfront and she estimates it will cost \$11.50 a year for batteries. The second costs \$59.00 upfront, but only \$5.10 a year for batteries. How long will it take for the less expensive calculator to equal the total cost of the other calculator?